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### AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1-14. (CANCELLED):

15.(CURRENTLY AMENDED): An optical amplifier comprising:

an input terminal receiving an optical input signal;

an optical coupler dividing the optical input signal into a first optical signal and a second optical signal;

an optical filter operatively connected to the optical coupler filtering for passing the first optical input signal sund for ascertaining a level of the optical input signal through a detector;

eaid a detector being operatively connected to the optical filter detecting a light

power from the filter for receiving the first optical aignal passed through the optical filter

to detect the level of the optical input signal; and

an optical fiber amplifier formed with erbium operatively connected to the optical coupler for amplifying the second optical signal with excitation by an exciting light, which is supplied from an output side of the optical fiber amplifier.

16. (CURRENTLY AMENDED): An optical amplifier comprising:

an input terminal receiving an optical input signal;

an optical coupler dividing the optical input signal into a first optical signal and a second optical signal;

an optical filter operatively connected to the optical coupler for passing the first optical signal[[,]] and blocking an exciting light, which exists along with the first optical signal, and for accortaining a level of optical input signal through a detector,

said a detector being operatively connected to the optical filter [[for]] receiving a filtered light of the first optical signal passed through the optical filter to detect the level of the optical input eignal; and

an optical fiber amplifier formed with erbium operatively connected to the optical coupler for amplifying the second optical signal with excitation by the exciting light, which is supplied from an output side of the optical fiber amplifier.

17. (PREVIOUSLY PRESENTED): The optical amplifier according to claim 16, wherein the optical filter blocks the exciting light, which exists along with the first optical signal input to the optical filter, to input to the detector.

## 18. (CURRENTLY AMENDED): An optical amplifier comprising:

an optical coupler receiving an optical signal a light swhich includes an optical eight and dividing the received optical the light into first and second optical lights;

an optical filter operatively connected to the optical coupler [for passing] filtering the optical signal light from the first optical light and for ascertaining a level of the optical signal through a detector; eard;

a detector being operatively connected to the optical filter for receiving the optical signal light passed through the optical filter to detect detecting a light power form the optical

### filter the level of the optical signal; and

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an optical fiber amplifier formed with erbium operatively connected to the optical coupler [[for]] amplifying the second optical light with excitation by an exciting light, which is supplied from an output side of the optical fiber amplifier.

19. (PREVIOUSLY PRESENTED): The optical amplifier according to claim 18, wherein the optical fiber amplifier is controlled to output an optical signal having a constant level. by a level of the light power from the filter.

# 20. (CURRENTLY AMENDED): An optical amplifier comprising:

an optical coupler dividing an input light into first and second eptical lights; an optical filter filtering the first optical light divided by from the optical coupler to output a filtered light;

a detector operatively coupled to the optical filter detecting the a filtered light; and

an optical fiber amplifier doped with erbium, receiving the second light from the optical coupler and amplifying the second optical light by an excitation light, which is supplied from an output side of the optical fiber amplifier.

21. (CURRENTLY AMENDED): An optical amplifier comprising: an optical coupler dividing an input light into first and second optical lights;

an optical filter filtering the first optical light divided by from the optical coupler

#### to output a filtered light;

an optical fiber amplifier doped with erbium, receiving from the optical coupler and amplifying the second optical light by an excitation light, which is supplied from an output side of the optical fiber amplifier; and

a detector coupled to the optical filter\_detecting the a filtered light level. wherein the excitation light is controlled according to the filtered light detected by the detector.